United States Environmental Protection Agency
EPA New England
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Public Information Repositories

RE: December 2002 Monthly Report
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site

Enclosed please find the December 2002 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,

Dean Tagliaferro

Dean Tagliaferro
1.5 Mile Reach Removal Action Project Manager

1. Overview

During December 2002, EPA, the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc. and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included soil and sediment excavation activities in Cell 5 and completing the backfilling of the riverbanks and riverbed in Cells 4 and 5. Also, the transfer of TSCA and non-TSCA materials from the stockpile management areas to the GE On Plant Consolidation Areas (OPCAs) was completed. Following these activities, the site was prepared for shutdown during the holidays and the upcoming excavation of Cell 6.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the sheetpile cells and their respective locations.

By the end of November 2002, Cell 4 excavation was completed, the river bottom backfilling was completed and the riverbank backfilling was initiated. During the first week of December, backfilling of the Cell 4 riverbank was completed with placement of filter layers A and B and riprap layer C3 (18-inch riprap). Once the riprap layer C3 was completed, water from the cell was pumped directly back to the river over the sheetpiling instead of to the water treatment system (WTS). Placement of the common fill layer was completed above the riprap and the silt fence was then installed above riprap layer C3. Topsoil will be placed at a later date. A final grade survey was performed in the Cell 4 riverbed to verify backfill grades. Construction of the rock wing deflector in Cell 4 was completed as shown on the design plans. Following verification of the backfill final grades in the restored Cell 4, pumping of water from Cell 4 was stopped and the cell was allowed to flood.

Cell 5 was isolated by the end of November with the installation of the cut off walls. During the first week of December, dewatering of Cell 5 was changed to pump water from the river to WTS. Then, the sealing of the sheetpiling with jute and the construction of swales and sumps were completed. Grade stakes and excavation marks were installed and excavation of TSCA and non-TSCA material in the riverbed and riverbank was started. A verification survey was completed following excavation of the 0 to 1 foot and 0 to 2 foot TSCA areas in Cell 5.

Completed Cell 6 pre-excavation topographic survey.

The transfer of excavated sediment and soil to the OPCAs was initiated. Non-TSCA material was transported from Building 65 to Hill 78 and materials from the Cell 5 excavation was transported directly to Hill 78. Paint filter tests were collected at 1 per 100 cubic yards (cy) of material loaded. (See Table 1 for a summary of material transported to the OPCAs)

During the second week of December, the excavation of the riverbed and riverbank in Cell 5 was completed and the excavation elevations were verified by survey. Backfilling activities in Cell 5 were started. Grade stakes were set and the common fill, filter layer A and riprap layer were installed in the riverbed. For the first 100 feet of the Cell, riprap layer C2 (12-inch riprap) was

placed, the remainder of the riverbed was backfilled with riprap layer C1 (9-inch riprap). The decrease in riprap size is a result of the expected decrease in river velocities in this area. Common fill was installed in Cell 5 on the riverbank directly over excavation to establish proper subgrade elevations before installing filter layer A. Subsequently, backfilling with Filter Layer A and B were completed on the riverbank in Cell 5 up to elevation 975 ft. Grade stakes were set on the riverbank for installation of the riprap up to elevation 975 ft. Throughout this time, water from Cell 5 was pumped to the WTS for treatment.

The transfer of excavated soil from the Stockpile Management Area and directly from Cell 5 to the OPCA continued through out the week. Non-TSCA material was hauled from the Building 65 stockpile area and directly from Cell 5 excavation to the Hill 78 OPCA.

During the third week of December, the placement of riprap layer C3 on Cell 5 riverbank was completed up to elevation 975 ft. Once the riprap was completed to this elevation, water from Cell 5 was pumped directly back to the river. Approximately 26 inches of common fill was placed above elevation 975 to the top of riverbank and silt fence was placed on the riverbank above the riprap. Topsoil will be placed at a later date. A wing deflector was constructed and the habitat boulders were installed in Cell 5 as shown on the design plans. Following the finished grade backfill verification, approval was given of the Cell 5 restoration and the sheetpile was removed, allowing Cell 5 to flood.

The transfer of excavated soil from the Stockpile Management are to the OPCA was completed. Non-TSCA material from Building 68 was hauled to the Hill 78 OPCA and the TSCA material from Building 63 was hauled to the Building 71 landfill. At the end of the month, approximately 363 cy of NAPL-impacted material remained in Building 68, approximately 110 cy of non-TSCA material remained in Building 68 and 60 cy of TSCA material remained in Building 63.

The upstream sheetpile cut off wall of Cell 4, the Cell 2/4 centerline sheetpile wall to station 501+30, and the downstream sheetpile cut off wall of Cell 4 were all removed. The downstream cut off wall of Cell 5 was driven down to the mudline to be used at a later date in Cell 5A. This opened up the cells and allowed for the river to flow on both sides of the sheetpile. Preparation activities, generation of the Cell 6 excavation cross sections, and the relocation of pumps and equipment was performed for the upcoming Cell 6 remediation. Dump trucks were decontaminated and staged in buildings 65 and 68. Other miscellaneous site cleanup activities were performed, the site was secured, and the crew demobilized until January 6, 2003.

During the month of December, the water treatment system treated water from Cells 4 and 5. Sampling of the water treatment system for parameters included in the NPDES exclusion permit was performed on December 18, 2002. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring was performed on a daily basis. The monthly PCB air monitoring event was performed on December 10, 2002. The twice-monthly surface water sampling for total suspended solids (TSS) and PCBs was performed on December 4 and December 18, 2002. Sampling of common fill for chemical parameters was performed on December 3, 5, 9, 13, and 17 2002 and sampling for Filter Layer A and top soil for chemical parameters was performed on December 3, 2002. Wipe samples were collected from decontaminated equipment on December 20, 2002 to verify proper decontamination.

Geotechnical samples were collected for top soil, common fill, 9-inch, 12-inch and 18-inch rip rap, Filter Layer A, and Filter Layer B. The results of the geotechnical testing are not included in the monthly reports but are contained in other submittals and are available upon request.

Stockpile management activities continued throughout the month of December. Daily inspections, operation and maintenance activities were performed within Building 63, 65 and 68. This included the collection of accumulated water that drained from the stockpiles, transporting the water to the on-site water treatment system, relocating NAPL-impacted soil at the stockpile management areas, and re-setting and pinning jersey barriers for the stockpile areas. Paint filter testing was performed on materials transported to the OPCAs to ensure no free liquids were present. In addition, a staging area for excavated concrete was constructed of concrete blocks, polyethylene sheeting and sand bags. The area includes a divider for TSCA and non-TSCA materials. The concrete staging area was constructed on GE's Lyman Street parking lot. Traffic control was conducted on Lyman Street throughout the month.

Miscellaneous site preparation and maintenance activities performed in December included maintenance and repairs to the stockpile area trucking route. Preparations were started on parcel I8-23-6 for Phase 2 construction activities. Trees were cut on the riverbank behind the car wash located on this parcel and a chain-link fence was installed at the top of the riverbank.

3. Sampling/test results received

PCB and non-PCB sample results for the water treatment system sampling program were received for the samples collected on December 18, 2002 (Table 2). Non-PCB analytical results were received for samples collected on November 25, 2002 (Table 2a). Non-PCB analytical results for the WTS samples collected on December 18 are not available yet. Analytical results for backfill materials are summarized in Table 3. This includes the sampling results for a sample of Filter Layer A collected on December 3, samples of common fill collected on December 3, 5, 9, 13, and 17 2002, and a sample of top soil collected on December 3. The results of the daily particulate air monitoring program are summarized in Table 4. Table 5 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on November 20, December 4, and December 18, 2002 are presented in Table 6. Results for four PCB wipe samples for decontaminated equipment collected on December 20 are summarized in Table 7. A summary of the results for the PCB air sampling conducted on November 21, 2002 and December 10, 2002 are provided in Table 8.

4. Diagrams associated with the tasks performed

Figure 1 is a map of the Phase I area, and includes layout of Cells 1A, 1B, 2, 3, 4, 5, 5A, 6, and 6A, lot parcel identification numbers, water monitoring locations, PCB air sampling locations, access road locations, fence line location, the water treatment system pad location, crane pad locations, the effluent discharge location, and the utility trench location.

5. Reports received and prepared

Weston received a vibration monitoring summary report for the period of December 2 to December 27 from Geosonics, Inc. During this period, the seismograph was set up at the Lyman Street Bridge on continuous seismic mode. Activities occurring near the Lyman Street Bridge during this period included normal background activities, sheet pile driving, and general construction activities. The maximum ground vibration level measured (outside of the times when the unit was disturbed for maintenance) reached 0.1 inches per second (ips) on December 19, 2002. This level represents 5% of the state's recommended limit of 2.0 ips. All readings during this period complied with State Regulations.

During the month of December Weston prepared two technical memorandums titled; *Use of Survey Data in Phase I Construction* and *Summary of Spill Incident* on October 21, 2002. The Use of Survey Data in Phase I Construction memorandum describes the changes made in the approach for determining excavation cuts in the river and on the banks in Phase I of the 1.5 mile Removal Action. The Summary of Spill Incident on October 21,2002 memorandum describes the circumstances surrounding the spill of excavated sediment from the Houastonic River, which had been loaded into an off-road vehicle and released from the back of the vehicle during transport from Hathaway Street across the GE facility to Building 65 stockpile area. The two memorandums are not included in the monthly reports but are contained in other submittals and are available upon request.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in January 2003

- Complete installation of Cell 6A centerline as well as downstream cutoff wall.
- Excavate and backfill Cells 6 and 6A.
- Remove centerline sheet piles between cells 2 and 4.
- Install Cells 7 and 8 centerline sheetpile.
- Perform pre-excavation topographic survey and re-design excavation cross sections for Cell 6A and 7.
- Continue stockpile management activities at Buildings 63, 65 and 68.
- Transport NAPL-impacted materials to an approved off-site disposal facility.
- Complete construction of two backfill material staging areas on Parcel I8-23-6.

- Procure fencing and tree clearing subcontractors for work on parcel I8-24-1.
- Continue operation of water treatment system.
- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), water treatment system sampling (monthly) and backfill material sampling (as needed).
- Continue vibration monitoring at Lyman Street Bridge.

8. Attachments to this report

Table 1. Excavation Quantity Summary Table

Table 2. NPDES PCB Sampling Results for Water Treatment System

Table 2a. NPDES non-PCB Sampling Results for Water Treatment System

Table 3. Backfill Material Testing Results

Table 4. Daily Air Monitoring Results

Table 5. Daily Water Column Turbidity Monitoring Results

Table 6. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results

Table 7. Equipment Confirmatory Wipe Sample Results

Table 8. PCB Air Sampling Results

Figure 1- Phase I Site Plan

Photodocumentation

Dean Tagliaferro
1.5 Mile Reach Removal Action Project Manager